

REMARKS

Claims 1-125 are now pending in the application. Applicants would like to thank the Examiner for the courtesy extended during the personal interview conducted on April 19, 2006. During the interview, Applicants' representative and the Examiner discussed the power amplifier of Pollanen. No agreement was reached. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 101

Claims 117-125 stand rejected under 35 U.S.C. § 101 for being directed to non-statutory subject matter. In particular, claims 117-125 are directed to a computer program. Applicants amended claims 117-125 according to the Examiner's suggestions. These amendments are not narrowing amendments. Applicants respectfully submit that this rejection is moot.

REJECTION UNDER 35 U.S.C. § 102

Claims 31-39, 41, 45-49, 51-59, 61, 65-69, 71-79, 81, 85-88, 90-96, 101-107, 111-115, 117-122 are rejected under 35 U.S.C. § 102(b) as being anticipated by Pollanen, U.S. Pat. No.6,289,205. This rejection is respectfully traversed.

With respect to claim 31, Pollanen fails to show, teach, or suggest a voltage detector in communication with a power amplifier of a transmitter for detecting an output voltage of the power amplifier and a current detector in communication with the power amplifier for detecting an output current of the power amplifier, wherein at least one of

the output voltage and the output current of the power amplifier is at least one of an output voltage and an output current of an output load of the transmitter.

For anticipation to be present under 35 U.S.C §102(b), there must be no difference between the claimed invention and the reference disclosure as viewed by one skilled in the field of the invention. Scripps Clinic & Res. Found. V. Genentech, Inc., 18 USPQ.2d 1001 (Fed. Cir. 1991). All of the limitations of the claim must be inherent or expressly disclosed and must be arranged as in the claim. Constant v. Advanced Micro-Devices, Inc., 7 USPQ.2d 1057 (Fed. Cir. 1988). Here, Pollanen fails to disclose the limitation that at least one of the output voltage and the output current of the power amplifier is at least one of an output voltage and an output current of an output load of the transmitter.

Exemplary embodiments of the present invention shown in FIGS. 1 and 2 illustrate a power amplifier 105 connected to an output load 108 such as an antenna. In particular, FIG. 2 shows that the power amplifier 105 is connected to the load 108 at an output connection 205. In other words, an output voltage V_{ac} and an output current I_{ac} of the power amplifier 105 correspond to voltage and/or current of the load 108. Consequently, the power detector 120 receives a voltage signal and a current signal that are representative of the actual voltage and/or current of the load 108 (i.e. the true voltage and current output of the transmitter). The power controller 130 adjusts the power amplifier 105 accordingly.

In contrast, FIG. 9 of Pollanen discloses that the power controller receives output voltage and current of a first amplifier and controls output characteristics of a second amplifier. For example, the Examiner alleges that an amplifier included in the

transmitter element 3 corresponds to the power amplifier of Applicants' claim 1. Applicants respectfully submit that output voltage and current of an alleged amplifier in the transmitter element 3 is not the output voltage and current of an output load of the transmitter. For example, Pollanen includes a transistor T1. The transistor T1 communicates with an antenna 8. The transistor T1 amplifies an output of the transmitter element 3. In other words, the output voltage and/or current of the transistor T1 corresponds to the output voltage and/or current of the antenna 8.

Applicants respectfully note that claim 1 requires that the power controller is in communication with the power amplifier to regulate the true output power delivered by the power amplifier, wherein at least one of the output voltage and the output current of the power amplifier is at least one of an output voltage and an output current of an output load of the transmitter. In contrast, Pollanen discloses a controller 6 in communication with a second amplifier (i.e. the amplifier in the transmitter element 3) based on output voltage and current of a first amplifier (i.e. the transistor T1). Pollanen does not disclose a power controller that regulates true output power of a power amplifier based on a power signal that is based on output voltage and current of the same power amplifier. Applicants respectfully submit that claim 31 should be allowable for at least the above reasons. Claims 32-125 should be allowable for at least similar reasons.

With respect to claim 1, Pollanen fails to show, teach, or suggest a voltage detector that comprises a voltage scaler for scaling the output voltage of the power amplifier and a voltage scaling ratio controller for controlling a voltage scaling ratio of the voltage scaler to maintain the voltage signal within a predetermined voltage range.

An exemplary embodiment shown in FIG. 1 of the present invention illustrates a voltage detector 110 that includes a voltage scaler 135 and a ratio controller 150. The ratio controller 150 “can be comprised of any type of processor and computer memory. The voltage scaling ratio controller 150 can set the voltage scaling ratio of the voltage scaler 135 based upon a predetermined target output power of the power amplifier 105. For example, the system 100 can have a plurality of associated target output power levels...each target output power level can be associated with a different voltage scaling ratio.” (Paragraph [0070]). In other words, the voltage scaling ratio controller 150 controls the voltage scaling ratio to maintain the voltage signal within a predetermined voltage range.

In contrast, the Examiner alleges that FIG. 9 of Pollanen discloses a voltage scaling ratio controller A1. Applicants respectfully note that element A1 is a comparator and that the Examiner also relies on the comparator A1 to disclose the voltage scaler. Applicants respectfully submit that such an interpretation of the structure is improper. The comparator A1 outputs a scaled voltage at a fixed ratio (i.e. outputs a voltage according to a fixed scaling ratio). The comparator A1 does not control a voltage scaling ratio. Applicants respectfully submit that claim 1, as well as its dependent claims, should be allowable for at least the above reasons. Claim 16, as well as its dependent claims, should be allowable for at least similar reasons.


CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests

that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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